From: PETERSON Jenn L

To: <u>Burt Shephard/R10/USEPA/US@EPA</u>

Cc: Joe Goulet/R10/USEPA/US@EPA; Chip Humphrey/R10/USEPA/US@EPA

Subject: RE: Wording on dioxin TEQ in fish tissue comment for Portland Harbor BERA comments

Date: 06/27/2012 03:12 PM

Hi Burt,

This looks good to me -(b) (6)

Jennifer

From: Burt Shephard [mailto:Shephard.Burt@epamail.epa.gov]

**Sent:** Wednesday, June 27, 2012 12:30 PM

To: PETERSON Jenn L

**Cc:** Joe Goulet; Chip Humphrey

Subject: Wording on dioxin TEQ in fish tissue comment for Portland Harbor BERA comments

Jennifer,

Here's what I wrote down during our discussions this morning. Please edit/revise as you see fit to address your concerns.

For risks to fish themselves from chemicals eliciting dioxin-like toxicity, perform a TEQ calculation for risks using the World Health Organization TEFs for fish in conjunction with the appropriate dioxin, furan and PCB congener analytical data for fish tissues. The dioxin TEQ and total TEQ concentrations should be compared to the screening level benchmark of 50 pg/g (wet weight) for 2,3,7,8-TCDD. Calculations and results need to be presented in a new table, as this information appears to be unavailable in the draft final BERA. EPA believes that this screen, particularly when applied to the Round 3b fish tissue data, will identify at least one smallmouth bass composite sample as having a total TEQ hazard quotient greater than or equal to 1.0. This analysis may also identify other fish species with total TEQ hazard quotients greater than or equal to 1.0. For fish samples where the dioxin TEQ or total TEQ hazard quotients exceed 1.0, a baseline ecological risk TRV will need to be developed using the tissue residue TRV derivation methodology used to derive the other BERA fish tissue TRVs. The BERA TEQ TRV will then be compared to the measured TEQs in fish tissue to identify the baseline ecological risk hazard quotients for dioxin TEQ and total TEQ.

Best regards,

Burt Shephard Risk Evaluation Unit Office of Environmental Assessment (OEA-095) U.S. Environmental Protection Agency, Region 10 1200 6th Avenue Seattle, WA 98101

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"A platypus is a duck designed by a committee"

- Australian saying